

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>Co 10310</b>		FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. <b>PCT/EP2004/007173</b>	International filing date (day/month/year) <b>01.07.2004</b>	Priority date (day/month/year) <b>10.07.2003</b>	
International Patent Classification (IPC) or national classification and IPC <b>C08G77/395, C07F9/40</b>			
Applicant <b>CONSORTIUM FÜR ELEKTROCHEMISCHE INDUSTRIE GMBH</b>			

  

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <b>5</b> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																									
<p>4. This report contains indications relating to the following items:</p> <table> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>		<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/007173

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-13 \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. 1-10 \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the drawings:
- sheets \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-10	YES
	Claims		NO
Inventive step (IS)	Claims	1-10	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-10	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
D1 US 2843615 A of 15.07.1958			
1. The present application concerns a method of preparing phosphonic ester-modified organosiloxanes with phosphon <u>methy</u> lsilyl groups - see formula (I) of the current main claim - by aqueous hydrolysis of phosphon <u>methy</u> lsilanes of formula (III), either alone or in the presence of silanes of formula (II) - see claims 1-9, and the use of silanes as antistatic additive - see claim 10.			
2. The subjects of claims 1-10 are novel within the meaning of PCT Article 33(2). None of the search report citations pertains to a method of preparing phosphonic ester-modified organosiloxanes with phosphon <u>methy</u> lsilyl groups - see formula (I) of the current main claim - by aqueous hydrolysis of phosphon <u>methy</u> lsilanes of formula (III), either alone or in the presence of silanes of formula (II) - see claims 1-9, and the use of silanes as antistatic additive - see claim 10.			

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

D1, see example 14, pertains to a method of preparing phosphonic ester-modified organosiloxanes with phosphonomethylsilyl groups by aqueous hydrolysis of phosphonomethylsilanes in the presence of dimethyl diethoxysilane, i.e. a silane of formula (II).

The method disclosed in the present application differs from D1 by the use of a phosphonomethylsilane as starting material instead of phosphonoethylsilane.

3. The subjects of claims 1-10 are also inventive within the meaning of PCT Article 33(3).

The application addresses the problem of providing a further method of preparing phosphonic ester-modified organosiloxanes wherein the phosphonic ester-modified organosiloxanes have phosphonomethylsilyl groups.

A person skilled in the art is familiar with the method, disclosed in D1, example 14, of preparing phosphonic ester-modified organosiloxanes with phosphonoethylsilyl groups by means of hydrolysis of phosphonoethylsilanes in the presence of dimethyl diethoxysilane.

However, a person skilled in the art would not draw on D1 and the method disclosed there for solving the above problem because on page 1 of D1, end of column 1 to column 2, it is indicated that

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	<p>phosphonic acid ester-modified organosiloxanes with <u>phosphonomethylsilyl</u> groups are unstable in the presence of strong alkalis and acids because the methylene bridge is cleaved.</p> <p>Thus, none of the search report citations suggest the solution found in the present application of providing such phosphonic ester-modified organosiloxanes with <u>phosphonomethylsilyl</u> groups by a method of aqueous hydrolysis of <u>phosphonomethylsilanes</u> of formula (III) either alone or in the presence of silanes of formula (II) as defined in claims 1-9, or the use of the phosphonic ester-modified organosiloxanes as antistatic additive as defined in claim 10.</p> <p>The subjects of claims 1-10 of the present application are therefore inventive.</p> <p>4. The subjects of claims 1-10 have industrial applicability within the meaning of PCT Article 33(4).</p>